

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: D. H. Hough & Hough Examiner #: 78153 Date: 8/12/02
 Art Unit: 1644 Phone Number 30 (8-4844) Serial Number: 10/071,247
 Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched.

Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Fluorination of Proteins & Peptides for F-18 positron emission tomography
 Inventors (please provide full names): _____

Earliest Priority Filing Date: 8/3/97

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search attached Claims 13-15.

CS6463IZ U.1.3

Jan Delaval
 Reference Librarian
 Biotechnology & Chemical Library
 CM1 1E07 - 703-308-4498
 jan.delaval@uspto.gov

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Searcher: Jan
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 Date Searcher Picked Up: 8/12/02
 Date Completed: 8/12/02
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Type of Search

NA Sequence (#)
 AA Sequence (#)
 Structure (#) _____
 Bibliographic _____
 Litigation _____
 Fulltext _____
 Patent Family _____
 Other _____

Vendors and cost where applicable

STN
 Dialog _____
 Questel/Orbit _____
 Dr. Link _____
 Lexis/Nexis _____
 Sequence Systems
 WWW/Internet _____
 Other (specify) _____

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(FILE 'REGISTRY' ENTERED AT 17:36:08 ON 12 AUG 2002)
DEL HIS

FILE 'HCAPLUS' ENTERED AT 17:36:25 ON 12 AUG 2002
E US6187284/PN

L1 1 S E3
E US6358489/PN
L2 1 S E3
E US97-057485/AP, PRN
L3 1 S E5
L4 1 S L1-L3
SEL RN

FILE 'REGISTRY' ENTERED AT 17:37:28 ON 12 AUG 2002
L5 37 S E1-E37
L6 3 S L5 AND SQL/FA

FILE 'HCAPLUS' ENTERED AT 17:39:56 ON 12 AUG 2002
E GRIFFITHS G/AU

L7 120 S E3, E12, E31, E32
E IMMUNOMEDIC/PA, CS
L8 121 S E6-E20
L9 183 S L7, L8 NOT L4
L10 2 S L9 AND (F OR FLUORIN?) ()18
L11 0 S L9 AND F18
L12 181 S L9 NOT L10
SEL RN L10

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L13 85 S E1-E85
L14 12 S L13 AND PROTEIN/FS

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L15 SEL L12 1- RN : 751 TERMS
SET SMARTSELECT OFF

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L16 751 S L15

L17 152 S L16 AND PROTEIN/FS
L18 152 S L17 NOT L6, L14
L19 0 S L18 AND F/ELS
L20 89 S L18 AND SQL<=10
L21 48 S L20 NOT MULTICHAIN/NTE
L22 17 S L21 NOT (PHENYLALAN? OR HISTID?)
L23 1 S L22 AND C56H63I2N11O13
E C56H63I2N11O13/MF
E GYWGKGYW/SQEP

L24 1 S E3
L25 1 S L23, L24
L26 89 S L18, L14, L6 AND S/ELS
L27 77 S L26 AND 46.150.18/RID
L28 77 S L27 AND NR>=2
L29 57 S L28 AND NC4-C6/ES
L30 13 S L29 NOT PHENYLALAN?
L31 9 S L30 NOT PROL?
L32 5 S L31 AND S>=2
E CYS-TYR-TRP-GLY-CYS-GLY-TYR-TRP/SQEP
E GLY-TYR-TRP-GLY-LYS-GLY-TYR-TRP/SQEP
SAV L25 NEON071247/A

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FILE 'HCAPLUS' ENTERED AT 17:52:46 ON 12 AUG 2002

L33 1 S L25

L34 1 S L33 AND L7,L8

FILE 'USPATFULL, USPAT2' ENTERED AT 17:53:01 ON 12 AUG 2002

L35 1 S L25

=> fil reg

FILE 'REGISTRY' ENTERED AT 17:53:23 ON 12 AUG 2002

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STRUCTURE FILE UPDATES: 11 AUG 2002 HIGHEST RN 443634-39-7

DICTIONARY FILE UPDATES: 11 AUG 2002 HIGHEST RN 443634-39-7

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d sqide can 125

L25 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 253197-60-3 REGISTRY

CN D-Tryptophan, N-acetylglycyl-3-iodo-D-tyrosyl-D-tryptophylglycyl-N6-acetyl-
D-lysylglycyl-3-iodo-D-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: PN: WO9966951 PAGE: 61 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified

type	-----	location	-----	description
terminal mod.	Gly-1	-		N-acetyl
modification	Tyr-2	-		iodo<I>
modification	Lys-5	-		acetyl<Ac>
modification	Tyr-7	-		iodo<I>

SEQ 1 GYWGKGYW

=====

HITS AT: 1-8

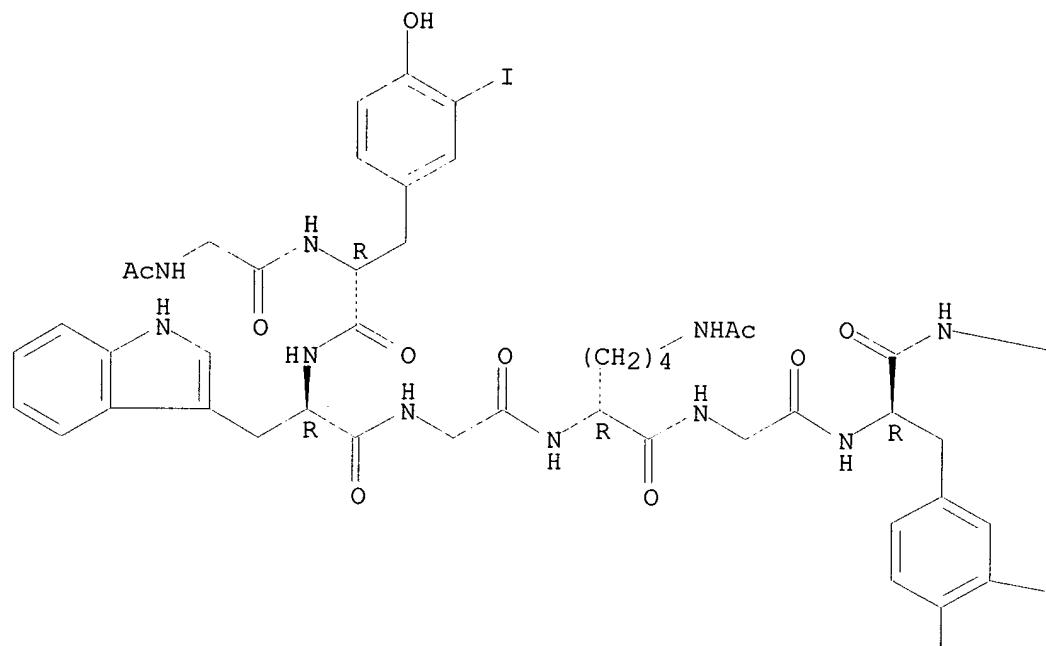
MF C56 H63 I2 N11 O13

SR CA

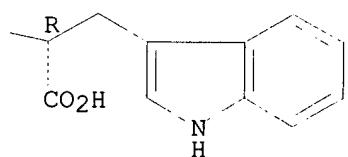
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

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PAGE 1-B



PAGE 2-A



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:69307

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 17:53:31 ON 12 AUG 2002
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FILE COVERS 1907 - 12 Aug 2002 VOL 137 ISS 7
 FILE LAST UPDATED: 11 Aug 2002 (20020811/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d all hitstr 134

L34 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
 AN 1999:819263 HCAPLUS
 DN 132:69307
 TI Use of bispecific antibodies for pre-targeting diagnosis and therapy
 IN Hansen, Hans J.; Griffiths, Gary L.; Leung, Shui-On; McBride, William J.; Qu, Zhengxing
 PA Immunomedics, Inc., USA
 SO PCT Int. Appl., 76 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K039-00
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 8, 9
 FAN.CNT 14

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9966951	A2	19991229	WO 1999-US13879	19990622
	WO 9966951	A3	20000615		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AU 9945792 A1 20000110 AU 1999-45792 19990622
 EP 1089766 A2 20010411 EP 1999-928808 19990622
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 JP 2002518460 T2 20020625 JP 2000-555637 19990622
 PRAI US 1998-90142P P 19980622
 US 1998-104156P P 19981014
 WO 1999-US13879 W 19990622
 OS MARPAT 132:69307
 AB The present invention relates to a bispecific antibody or antibody fragment having at least one arm that specifically binds a targeted tissue and at least one other arm that specifically binds a targetable conjugate. The targetable conjugate comprises a carrier portion which comprises or bears at least one epitope recognizable by at least one arm of said bispecific antibody or antibody fragment. The targetable conjugate further comprises one or more therapeutic or diagnostic agents or enzymes. The invention provides constructs and methods for producing the bispecific antibodies or antibody fragments, as well as methods for using them.
 ST immunotargeted drug delivery bispecific antibody diagnosis
 IT Imaging agents
 (MRI; bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Diagnosis
 (agents; bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Chelating agents
 Drug targeting
 Genetic engineering
 Molecular cloning
 Radiotherapy
 Test kits
 Transcription initiation
 Transduction, genetic
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Fusion proteins (chimeric proteins)
 RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Haptens
 RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Chelates
 RL: FMU (Formation, unclassified); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Carbohydrates, biological studies
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Peptides, biological studies
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Radionuclides, biological studies
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)
 IT Antibodies
 RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (bispecific; bispecific antibodies for pre-targeting diagnosis and

therapy)
IT Toxicity
 (drug; bispecific antibodies for pre-targeting diagnosis and therapy)
IT Immunoglobulins
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU
(Biological study, unclassified); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); PROC (Process); USES (Uses)
 (fragments; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Fissurella
 (hemocyanin of, conjugation of; bispecific antibodies for pre-targeting
 diagnosis and therapy)
IT Antibodies
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical
process); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); PROC (Process); USES (Uses)
 (humanized; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Drug delivery systems
 (immunoconjugates; bispecific antibodies for pre-targeting diagnosis
 and therapy)
IT Enzymes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); THU
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (immunoconjugates; bispecific antibodies for pre-targeting diagnosis
 and therapy)
IT Drug delivery systems
 (immunotargeted; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Hemocyanins
RL: RCT (Reactant); RACT (Reactant or reagent)
 (keyhole limpet, conjugation of; bispecific antibodies for
 pre-targeting diagnosis and therapy)
IT Antibodies
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU
(Biological study, unclassified); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); PROC (Process); USES (Uses)
 (monoclonal; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Circulation
 (nonlocalized antibody clearing from; bispecific antibodies for
 pre-targeting diagnosis and therapy)
IT Drug delivery systems
 (prodrugs; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Epitopes
 (site-specific; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Milk
Plant (Embryophyta)
 (transgenic protein prodn. in; bispecific antibodies for pre-targeting
 diagnosis and therapy)
IT Animal
Bacteria (Eubacteria)
Insect (Insecta)
Mammal (Mammalia)
 (transgenic; bispecific antibodies for pre-targeting diagnosis and
 therapy)
IT Embryo, animal
 (zygote, transduction of; bispecific antibodies for pre-targeting
 diagnosis and therapy)
IT 9016-18-6D, Carboxylesterase, conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (bispecific antibodies for pre-targeting diagnosis and therapy)

IT **253197-60-3P**
 RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)

IT 10098-91-6, Yttrium 90, reactions 14133-76-7, Technetium 99, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (bispecific antibodies for pre-targeting diagnosis and therapy)

IT 249292-65-7DP, Bz-DTPA and thiosemicarbazonyloxyglyoxylcysteine conjugate 253197-63-6P 253331-44-1DP, peptide conjugate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (bispecific antibodies for pre-targeting diagnosis and therapy)

IT 67-43-6, Dtpa 56491-86-2, Nota 60239-18-1, Dota 60239-22-7, Teta 253197-61-4D, Thiosemicarbazonylglyoxylcysteine, derivs. and peptide conjugates 253197-62-5, Thiosemicarbazinylacetyl cysteine
 RL: BPR (Biological process); BSU (Biological study, unclassified); NUU (Other use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
 (chelating agent; bispecific antibodies for pre-targeting diagnosis and therapy)

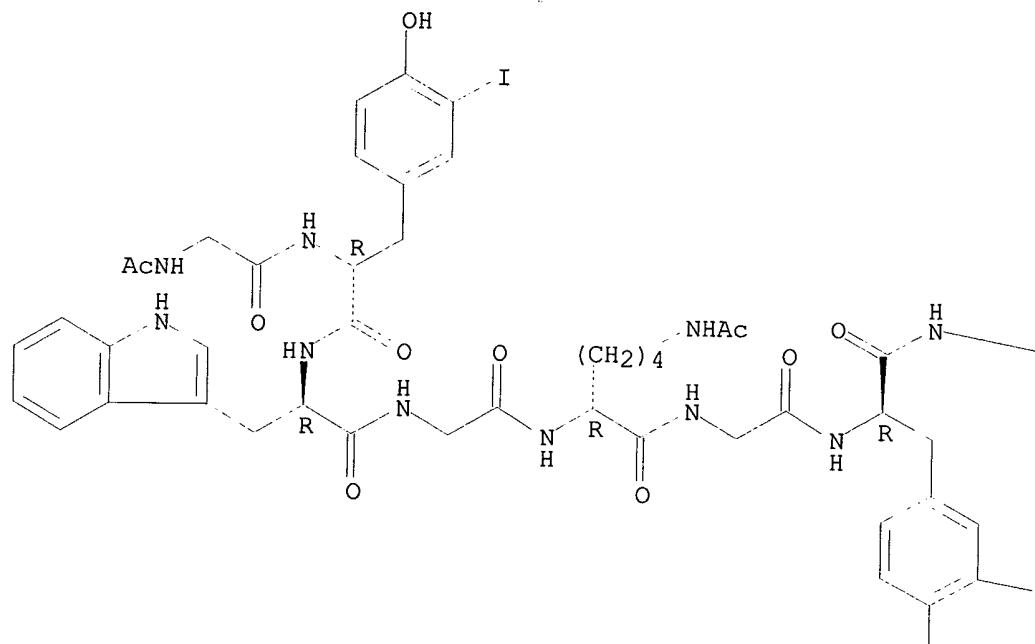
IT 7440-42-8, Boron, biological studies 14798-12-0, Boron 10, biological studies
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (irradn. of; bispecific antibodies for pre-targeting diagnosis and therapy)

IT **253197-60-3P**
 RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (bispecific antibodies for pre-targeting diagnosis and therapy)

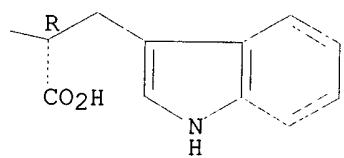
RN 253197-60-3 HCAPLUS
 CN D-Tryptophan, N-acetylglycyl-3-iodo-D-tyrosyl-D-tryptophylglycyl-N6-acetyl-D-lysylglycyl-3-iodo-D-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B



I

PAGE 2-A



=> fil uspatall

FILE 'USPATFULL' ENTERED AT 17:54:00 ON 12 AUG 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 17:54:00 ON 12 AUG 2002
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=> d bib abs hitstr 135

L35 ANSWER 1 OF 1 USPATFULL
AN 2000:30637 USPATFULL
TI Chair floatation device
IN Walker, Willette, 1104 Davis Dr., Tampa, FL, United States 33619
PI US 6036563 20000314
AI US 1998-90142 19980604 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Basinger, Sherman
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 359

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new chair floatation device for permitting a person, such as a child, to float comfortably in a body of water. The inventive device includes a hollow body member with a back wall portion forming a backrest, a seat portion, and a front wall portion. A pair of spaced apart leg holes extend through the front wall portion. A tray extends from the front wall and a pair of spaced apart armrests extend between the back wall portion and the front wall portion. A seat harness member 50 extends between the front wall portion 32 and the back wall portion 26 while a belt strap harness 60 is also coupled to the body member.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 253197-60-3P

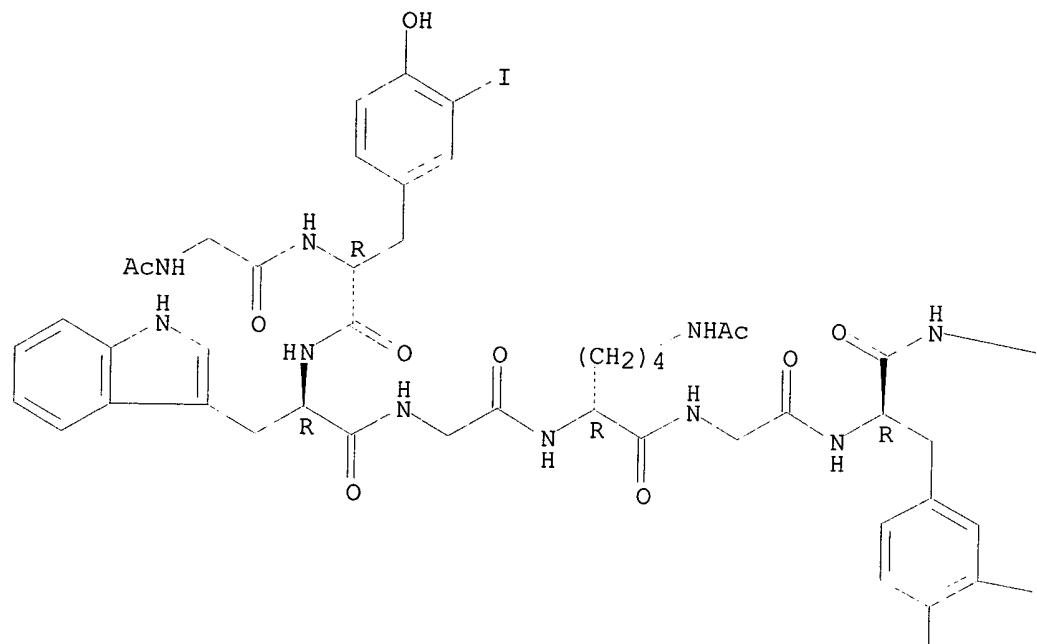
(bispecific antibodies for pre-targeting diagnosis and therapy)

RN 253197-60-3 USPATFULL

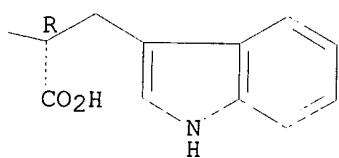
CN D-Tryptophan, N-acetylglycyl-3-iodo-D-tyrosyl-D-tryptophylglycyl-N6-acetyl-D-lysylglycyl-3-iodo-D-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B



I

PAGE 2-A



